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In the Claims:

1. (Currently Amended) A MOS transistor comprising:

e an inverted T-shaped gate electrode on a substrate, the gate electrode comprising a silicon base portion and a silicon column portion extending from the base portion, the base portion and the column portion doped with a same dopant material, the base portion of the gate electrode including having a first lateral protrusion extending laterally beyond from a lower portion of a first sidewall of the column portion of the gate electrode and a second lateral protrusion extending laterally beyond from a lower portion of a second sidewall of the column portion of the gate electrode;

a drain region in the substrate comprising a first lightly-doped drain region under the first lateral protrusion, a second lightly-doped drain region that is deeper than the first lightly-doped drain region adjacent the first lightly-doped drain region, and a heavily-doped drain region adjacent to the second lightly-doped drain region; and

a source region in the substrate comprising a first lightly-doped source region under the second lateral protrusion, a second lightly-doped source region that is deeper than the first lightly-doped source region, and a heavily-doped source region adjacent to the second lightly-doped source region.

- 2. (Original) The MOS transistor of Claim 1, further comprising an insulating gate spacer covering the first and second sidewalls of the gate electrode, wherein the second lightly-doped drain region and the second lightly-doped source region are under bottom portions of the insulating gate spacer.
- 3. (Original) The MOS transistor of Claim 2, wherein the heavily doped drain region is adjacent a first outer sidewall of the insulating gate spacer and wherein the heavily doped source region is adjacent a second outer sidewall of the insulating gate spacer.
- 4. (Currently Amended) The MOS transistor of Claim + 2, wherein the gate electrode has an inverted T shape wherein a bottom surface of the insulating gate spacer is on a curing thermal oxide layer.

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- 5. (Currently Amended) The MOS transistor of Claim 1, further comprising a gate dielectric layer interposed between the gate electrode and the substrate, wherein a first sidewall of the gate dielectric is aligned with a sidewall of the first lateral protrusion of the gate electrode and wherein a second sidewall of the gate dielectric is aligned with a sidewall of the second lateral protrusion of the gate electrode.
- 6. (Currently Amended) The MOS transistor of Claim 2 5, further comprising a curing thermal oxide layer on the sidewalls of the gate electrode, the first and second sidewalls of the gate dielectric, the second lightly-doped drain region and the second lightly-doped source region.
- 7. (Original) The MOS transistor of Claim 6, wherein the insulating gate spacer is on the curing thermal oxide layer.
- 8. (Original) The MOS transistor of Claim 7, further comprising a spacer etch stop layer interposed between the insulating gate spacer and the curing thermal oxide layer.
- 9. (Original) The MOS transistor of Claim 1, wherein the sidewalls of the first and second lateral protrusions are vertically profiled.
- 10. (Withdrawn) The MOS transistor of Claim 1, wherein the sidewalls of the first and second lateral protrusions are sloped at positive angles.
- 11. (Withdrawn) The MOS transistor of claim 1 wherein the sidewalls of the first and second lateral protrusions are sloped at negative angles.
- 12. (Original) The MOS transistor of claim 1 further comprising a metal silicide layer on the upper surface of the gate electrode, the surface of the heavily-doped drain region and the surface of the heavily-doped source region.

13-53. (Cancelled)

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- 54. (New) The MOS transistor of Claim 5, wherein the depth of the second lightly-doped drain region is about the same as the combined depth of the first lightly-doped drain region, the gate dielectric layer and the base portion of the inverted T-shaped gate electrode.
- 55. (New) The MOS transistor of Claim 1, wherein the base portion and the column portion of the gate electrode are not selectively etchable.